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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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John J. Sie

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EXAMINER

STRONCZER, RYAN S

ART UNIT

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2623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,043	Applicant(s) SIE ET AL.	
	Examiner Ryan Stronczer	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 May 2008 has been entered.

Election/Restrictions

Newly submitted claims 24-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 24-26 recite a first and second subset of the stream of images; said subset is not present in any previously presented claims and would represent an additional search burden on the Examiner.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. (cited in previous Office Action) and further in view of Masukura et al. (Pub. No.: US 2004/0148640).

As to claims 1, 2, and 10 Yamauchi teaches a method which includes converting a video image from a first aspect ratio to a second aspect ratio. In Figs. 1A-B of Yamauchi teach a method in which an original image in a 4:3 aspect ratio is converted into a 16:9 and vice-versa. Further, Fig. 13A-C of Yamauchi teach that the conversion information can change for various frames to accommodate subtitle placement; however, Yamauchi does not explicitly teach that the aspect ratio conversion information is contained in metadata associated with the video or that said metadata changes “dynamically,” as recited. Masukura et al. teaches a method for processing a video image in which the processing instructions are encoded in metadata associated with the content and that said metadata includes aspect ratio information [0071]. As to the limitation that the metadata “dynamically changes,” Masukura further teaches, “...the processing is basically carried out frame-by-frame...the metadata may be read as needed during processing” [0053-54]. It would have been obvious to combine the

aspect-ratio conversion taught by Yamauchi with the metadata processing taught by Masukura to allow the aspect ratio conversion information to be stored in metadata associated with the video content and to further allow said metadata to change during playback to allow for the placement of subtitles as suggested by Fig. 13 of Yamauchi.

As to the limitation that the video program be transmitted to a geographically different location, Examiner takes Official Notice that it is well known in the art to transmit a video program and associated metadata over a communications network to a plurality of devices. Additionally, Masukura teaches, “...*the output moving picture storage unit 106 may exist in a remote place by way of a network or broadcast waves*” [0033].

As to the recited distribution system in claim 10, Masukura teaches that the both the input and output moving-picture and metadata storage units may exist “*in a remote place by way of a network or broadcast waves*” [0029, 0033]. While Masukura does not explicitly teach the recited distribution point, Masukura teaches that “...*a video camera or a broadcast wave tuner may be used as the input moving-picture storage unit*” [0027].

As to claim 3, Masukura teaches that the metadata can be adapted to adjust for the aspect ratios of various portable devices which would be consistent with the recited “plurality of recited target aspect ratios.”

As to claims 4 and 5, Fig. 1A-2B of Yamauchi teach the recited functionality.

As to claim 6, Fig. 4 and 6 of Masukura teach that different areas of the image can be scaled differently as recited; further, Masukura teaches that the height or width

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of the image may be scaled differently to accommodate the aspect ratio of the display device, [0082]. As analyzed with respect to claims 1 and 2, the combination of Yamauchi and Masukura would have been obvious to one of ordinary skill in the art at the time of the invention and the functionality taught by Fig. 4 and 6 of Masukura would have allowed Yamauchi's system greater control over the scaling of the output image.

As to claims 7, 8, and 21, the recited "rotating or mirroring" and "plurality of discreet portions" is taught by Fig. 4 and 6 of Masukura as applied to claim 6. The shaded areas of Fig. 4 and 6 are equivalent to the recited "plurality of discreet portions," and their manipulation (movement, rotation, etc.) evident in the difference between the two figures is equivalent to the recited "rotating or mirroring" and "different transformations for different portions."

As to claim 9, the recited computer-readable medium and computer-executable instructions are inherent in a system capable of receiving and processing digital video, such as that taught by Masukura and Yamauchi.

As to claim 10, Masukura teaches that the both the input and output moving-picture and metadata storage units may exist *"in a remote place by way of a network or broadcast waves"* [0029, 0033]. While Masukura does not explicitly teach the recited distribution point, Masukura teaches that *"...a video camera or a broadcast wave tuner may be used as the input moving-picture storage unit"* [0027].

As to claim 11, Fig. 1 of Masukura teaches an output video display coupled to a processed video generator.

As to claims 12 and 13, paragraphs 0053-54 of Masukura (cited above) teach that the processing information is read from the metadata on a frame-by-frame basis, or as needed by the video processor; it is inherent that this would allow the video processor to change conversion to a third aspect ratio mid-stream if such change were indicated by the metadata.

As to claim 14, Fig. 4 and 6 of Masukura teach the recited “first and second cutout” and Fig. 1 teaches that the cutout-processing instructions are contained within the metadata.

As to claim 20, Yamauchi teaches a method which includes converting a video image from a first aspect ratio to a second aspect ratio. In Fig. 1B, an image originally in a 16:9 aspect ratio is converted into a 4:3 aspect ratio. The dashed lines overlaid on the 16:9 image in Fig. 1 would be the equivalent of aperture **1012** shown in Fig. 10 of the instant application. Fig. 1B of Yamauchi further teaches that only the portion of the 16:9 image corresponding with the overlay is displayed in the converted 4:3 image. Conversely, Fig. 1C of Yamauchi teaches a method for converting from an original 4:3 aspect ratio to a 16:9 aspect ratio. Further, the shaded areas of Fig. 4 and 6 of Masukura would be equivalent to the recited apertures or cutouts and movement and teach the recited “manipulations,” as analyzed w/r/t claims 7 and 8.

As to claim 23, Yamauchi (as applied above to claim 20) teaches a method including aspect ratio conversion in which the final converted image only displays a portion of the original image (see Fig. 1B).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi in view of Masukura as applied to claims 1 and 10 above, and further in view of Duffield et al. (US Patent No.: 5,461,427, previously cited).

As analyzed above, Yamauchi in view of Masukura teaches the method of claim 1 including the use of metadata to facilitate conversion from a first aspect ratio to a second aspect ratio, but does not explicitly teach the use of one or more video streams of the program. Duffield teaches that the same program may be simultaneously broadcast (simulcast) in both NTSC and HDTV standards so to accommodate viewers with NTSC-compatible televisions as well as users with HDTV sets. Duffield teaches that such simulcasting is necessary to service users of both standards because, "the HDTV system uses a 16:9 aspect ratio while the NTSC system has a 4:3 aspect ratio, the HDTV system will have 1125 television scan lines while the NTSC system has only 525" (Col. 1). Duffield further teaches a receiver which can receive and process both NTSC and HDTV signals and, "includes a controller responsive to user input for associating a single label with a pair of television channels, one being an NTSC-signal carrying channel, and the other being an HDTV-signal carrying channel" (Col. 2). Figs. 2a and 2b of Duffield show the same program displayed in both the 16:9 and 4:3 aspect ratios, respectively. As simulcasting the same video program in multiple formats to accommodate viewers with different display types was known in the art of video distribution, it would have been obvious to one of ordinary skill at the time of the invention to stream or broadcast the same program in multiple aspect ratios or display

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formats to allow users with different display capabilities to enjoy the same program. As Duffield's disclosure was published in 1995, it does not refer specifically to embodying video programs in a "content stream," but transmitting a video program in a content stream is an application of existing technologies that would have been obvious to one of ordinary skill in the art at the time of the invention.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Stronczer whose telephone number is (571) 270-3756. The examiner can normally be reached on 7:30 AM - 5:00 PM (EDT), Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571) 272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan Stronczer/
Examiner, Art Unit 2623

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2623